

Title (en)  
EMBEDDED TOUCHSCREEN AND DISPLAY DEVICE

Title (de)  
EINGEBETTETER BERÜHRUNGSBILDSCHIRM UND ANZEIGEVORRICHTUNG

Title (fr)  
ÉCRAN TACTILE INCORPORÉ ET DISPOSITIF D’AFFICHAGE

Publication  
**EP 3151098 A4 20180117 (EN)**

Application  
**EP 14863057 A 20140926**

Priority  
• CN 201410239885 A 20140530  
• CN 2014087598 W 20140926

Abstract (en)  
[origin: US2015378474A1] An in-cell touch panel and a display device are disclosed. The in-cell touch panel includes a top substrate and a bottom substrate disposed oppositely to each other, a common electrode layer disposed on a side of the bottom substrate that faces the top substrate and a touch sensing chip. The common electrode layer is partitioned into a plurality of independent self-capacitance electrodes and a plurality of wires for connecting the self-capacitance electrodes to the touch sensing chip. The touch sensing chip is configured to apply common electrode signals to self-capacitance electrodes in a display interval and determine touch positions by detecting capacitance value variation of self-capacitance electrodes in a touch interval. No additional layer is needed for the in-cell touch panel, thereby saving production costs and improving production efficiency.

IPC 8 full level  
**G06F 3/044** (2006.01); **G02F 1/1333** (2006.01); **G06F 3/041** (2006.01); **G09G 3/00** (2006.01)

CPC (source: EP US)  
**G06F 3/0412** (2013.01 - EP US); **G06F 3/04164** (2019.04 - EP US); **G06F 3/0443** (2019.04 - EP US); **G09G 3/00** (2013.01 - EP US)

Citation (search report)  
• [X] TW M453900 U 20130521 - SUPER TOUCH CO LTD [TW]  
• [I] CN 103793120 A 20140514 - BOE TECHNOLOGY GROUP CO LTD  
• [I] CN 103279245 A 20130904 - FOCALTECH SYSTEMS LTD  
• [A] US 2014132560 A1 20140515 - HUANG CHIEN-YING [TW], et al  
• [A] US 2013307817 A1 20131121 - KIM SUNGCHUL [KR]  
• See references of WO 2015180335A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**US 10198130 B2 20190205**; **US 2015378474 A1 20151231**; CN 104020905 A 20140903; CN 104020905 B 20170616; EP 3151098 A1 20170405; EP 3151098 A4 20180117; WO 2015180335 A1 20151203

DOCDB simple family (application)  
**US 201414647976 A 20140926**; CN 2014087598 W 20140926; CN 201410239885 A 20140530; EP 14863057 A 20140926